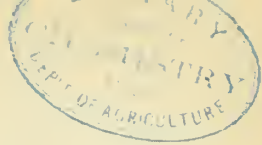


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[In binding the bulletins for 1905, pages i-viii at the end of this bulletin should be detached and placed before Bulletin 112, which begins with page 1.]

Maine Agricultural Experiment Station

BULLETIN No. 124.

DECEMBER, 1905.

FINANCES, METEOROLOGY, INDEX.

This bulletin contains the summary of the meteorological observations, the report of the treasurer, the index for the bulletins issued in 1905 and an index for the reports for 1901 to 1905. Bulletins 112 to 124 make up the Twenty-first Annual Report of the Station.

Requests for bulletins should be addressed to the
AGRICULTURAL EXPERIMENT STATION,
Orono, Maine.

MAINE
 AGRICULTURAL EXPERIMENT STATION
 ORONO, MAINE.

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HENRY A. MILLETT	<i>Meteorological Observer and Janitor</i>

METEOROLOGICAL OBSERVATIONS.

Lat. $44^{\circ} 54' 2''$ N. Lon. $68^{\circ} 40' 11''$ W. Elevation 150 feet.

The instruments used at this Station are the same as those used in preceding years, and include: Wet and dry bulb thermometers; maximum and minimum thermometers; rain-gauge; self-recording anemometer, vane, and barometer. The observations at Orono now form an almost unbroken record of thirty-seven years.

The winter of 1904-5 was one of unusual severity, December being $4\frac{1}{2}^{\circ}$, January 3° , and February 4° below the average for these months. Lower temperatures for both January and February have been recorded at this Station, but in only one instance, the winter of 1874-5, has the combined record for the three months fallen so low. During this same period the thermometer registered zero or below, as the minimum temperature, on no less than 50 days.

For three successive years the total precipitation has been very low, the deficit for the past year amounting to about 12 inches, or over one-fourth of the whole. The shortage was especially noticeable in March and October, in which months the precipitation was about one-fifth the average. In but one month of the year, November, did the precipitation equal the average amount. That these conditions were not confined to this particular locality is shown by the table on page 231.

METEOROLOGICAL SUMMARY FOR 1905.
Observations Made at the Maine Experiment Station.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean.	Total.
Highest barometer	30.57	30.42	30.66	29.97	30.23	30.09	30.87	30.43	30.30	30.43	30.31	30.66	30.41	.....
Lowest barometer	29.22	29.06	29.59	29.19	29.35	29.01	29.50	29.47	29.55	29.45	29.26	29.08	29.31	.....
Mean barometer	29.91	29.88	29.96	29.61	29.80	29.68	29.84	29.89	29.90	29.92	29.80	29.90	29.84	.....
Highest temperature	48°.0	45°.0	60°.0	74°.0	79°.0	87°.0	89°.0	89°.0	83°.0	78°.0	60°.0	48°.0	.....	.....
Lowest temperature	-30°.0	-19°.0	-14°.0	21°.0	31°.0	33°.0	71°.0	35°.0	29°.0	15°.0	2°.0	-17°.0	.....	.....
Mean temperature	12°.8	14°.8	27°.1	42°.7	52°.9	60°.6	68°.6	63°.9	57°.6	46°.7	35°.0	22°.9	42°.13	.....
Mean temperature for 37 years	15°.8	18°.9	28°.1	40°.7	52°.5	61°.8	66°.9	64°.9	57°.3	44°.8	34°.2	20°.4	42°.20	.....
Total precipitation in inches	4.28	2.20	0.83	2.22	3.47	3.13	2.19	2.13	3.19	0.78	4.08	3.51	.....	32.01
Mean precipitation for 37 years	4.29	3.89	4.34	2.85	3.48	3.53	3.30	3.56	3.41	3.82	3.73	3.78	.....	43.98
No. of days with precip. of .01 in. or more	9	6	6	6	12	12	6	7	11	4	10	9	.....	98
Snow fall in inches	25.5	22.0	2.2	.....	.....	.....	.....	.....	.....	.....	2.3	18.5	.....	70.5
Average snow fall for 37 years	23.1	21.4	15.8	5.1	0.3	.....	.....	.....	.....	0.8	8.0	17.1	.....	91.6
Number of clear days	17	14	18	8	9	10	10	12	13	18	8	13	.....	150
Number of fair days	1	6	8	16	10	3	15	12	2	7	9	5	.....	94
Number of cloudy days	13	8	5	6	12	17	6	7	15	6	13	13	.....	121
Total movement of wind in miles	4458	5263	4928	7147	5940	3971	4759	3614	3762	4636	5552	4295	.....	.....

Monthly and Annual Precipitation (as rain) for the Year 1905.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Bar Harbor.....	5.20	3.20	1.05	0.95	3.20	4.54	3.35	2.56	7.79	2.10	7.22	7.61	48.77
Chesuncok.....	2.67	0.69	1.32	0.71	2.42	1.65	1.52	1.38	1.18	0.77	3.15	2.22	19.68
Cornish.....	5.53	1.51	2.65	1.97	2.15	4.12	9.12	4.26	7.48	1.38	4.48	4.21	48.83
Debsconeag.....	.....	.....	.....	.....	.....	.....	4.80	1.10	2.92	1.31	4.28	.....	.....
Eastport.....	4.13	2.77	1.10	0.83	2.64	3.03	2.62	1.76	4.32	0.47	4.29	3.91	31.87
Fairfield.....	3.78	0.99	0.88	2.16	2.22	3.49	3.65	1.43	2.45	0.38	3.80	3.19	28.41
Farmington.....	3.79	0.70	1.41	2.12	2.65	3.60	4.07	3.10	5.27	1.24	2.58	2.69	33.22
Fort Fairfield.....	2.12	1.21	0.92	.....	.....	2.09	2.44	0.72	1.69	1.40	3.03	2.34	.....
Gardiner.....	4.85	1.32	0.94	.....	2.17	4.83	4.52	2.03	4.93	0.78	3.95	3.12	34.70
Houlton.....	2.83	1.60	0.70	2.10	2.00	1.50	1.45	0.12	1.80	1.00	2.25	2.40	18.90
Lewiston.....	4.42	1.80	1.48	1.25	2.04	4.12	4.58	1.79	5.51	1.01	3.70	3.65	35.64
Madison.....	4.08	1.61	2.13	2.59	3.73	4.65	5.75	2.23	5.61	1.13	4.60	3.45	41.56
Mayfield.....	4.25	.....	1.00	2.17	3.29	3.59	4.39	1.86	4.40	0.90	2.87	2.69	.....
Millinocket.....	5.45	1.25	0.77	2.05	2.91	2.41	2.92	2.08	3.47	1.49	4.29	3.57	32.66
North Bridgton.....	4.67	1.60	2.06	1.65	3.63	5.50	5.97	2.53	7.02	1.56	3.16	2.95	40.89
Oquossoc.....	3.33	1.03	1.53	1.91	3.63	3.06	3.78	2.49	2.86	1.67	1.55	1.47	28.40
Orono.....	4.28	2.20	0.83	2.22	3.47	3.13	2.19	2.13	3.19	0.78	4.08	3.51	32.01
Patten.....	4.29	0.90	0.90	2.50	2.15	5.25	2.00	0.06	3.96	1.38	3.30	2.00	28.60
Portland.....	5.16	1.78	1.97	1.43	2.58	3.98	3.65	2.78	5.35	0.95	4.45	5.44	38.62
Rumford Falls.....	3.90	1.11	2.08	2.11	2.33	4.15	4.61	2.85	4.21	1.51	2.92	2.98	34.76
South Lagrange.....	3.76	1.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thomaston.....	.....	.....	.....	1.50	2.43	3.54	4.93	2.37	5.82	1.45	5.02	.....	.....
Van Buren.....	1.42	1.61	0.78	1.08	3.26	3.27	2.54	0.15	2.20	1.43	1.60	2.60	21.65
Winslow.....	3.66	0.93	0.83	2.20	2.53	3.39	4.26	2.03	3.20	0.62	4.00	2.82	30.47

With the exception of readings from the Orono station, the above table is compiled from the monthly bulletins of the U. S. Weather Bureau.

REPORT OF THE TREASURER.

Maine Agricultural Experiment Station in account with the United State appropriation, 1904-5:

DR.

To receipts from the Treasurer of the United States as per appropriation for the fiscal year ending June 30, 1905, as per act of Congress approved March 2, 1887\$15,000 00

CR.

By salaries:

(a) Director and administration officers.....	\$2,500 00	
(b) Scientific staff.....	4,600 00	
(c) Assistants to scientific staff.....	1,300 00	
Total.....		\$8,300 00

Labor:

(a) Monthly employees.....	\$1,084 34	
(b) Daily employees.....	705 22	
Total.....		1,789 56

Publications		259 36
Postage and stationery.....		356 07
Freight and express		211 46
Heat, light and water.....		535 03
Chemical supplies.....		247 55
Seeds, plants and sundry supplies:		
(a) Agricultural.....	\$119 67	
(b) Horticultural.....	115 58	
(c) Botanical	6 32	
(d) Entomological	71 58	
(e) Miscellaneous	107 39	
Total.....		420 54
Fertilizers		120 29
Feeding stuffs		743 29
Library		329 85
Tools, implements and machinery		190 27
Furniture and fixtures.....		142 46
Scientific apparatus		178 64
Live stock		70 65
Contingent expenses.....		29 40
Travelling expenses.....		489 41
Building and repairs.....		586 17
Total.....		\$15,000 00

ISAIAH K. STETSON, *Treasurer.*

I, the undersigned, duly appointed Auditor of the Corporation, do hereby certify that I have examined the books of the Maine Agricultural Experiment Station for the fiscal year ending June 30, 1905, that I have found the same well kept and classified as above, and that the receipts for the year from the Treasurer of the United States are shown to have been \$15,000.00, and the corresponding disbursements, \$15,000.00; for all of which proper vouchers are on file and have been examined by me and found correct.

And I further certify that the expenditures have been solely for the purposes set forth in the act of Congress approved March 2, 1887.

GEORGE E. FELLOWS, *Auditor*.

Maine Agricultural Experiment Station in account with "General Account" for the year ending June 30, 1905.

DR.

To balance from 1903-1904	\$54 07	
Sales of produce, inspections, fees, etc.....	8,015 52	\$8,069 59

CR.

By salaries	\$3,141 46	
Labor.....	619 85	
Chemical supplies	129 47	
Feeding stuffs.....	2,000 00	
Traveling expenses.....	270 01	
Buildings	800 00	
Balance to 1905-1906 account	1,108 80	\$8,069 59

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A general index to the reports for 1885 to 1896 inclusive will be found in the report for 1896; and for the reports for 1897 to 1900 inclusive in the report for 1900.

In each reference the first two figures indicate the year. Thus, '04, 183 indicates page 183 of the report for 1904.

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